DRABA RAMOSISSIMA (BRASSICACEAE) NEW TO ALABAMA

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ABSTRACT

Draba ramosissima (Brassicaceae) is reported new for the vascular flora of Alabama based on a 2015 Marshall County collection made from a population on a limestone bluff along the Tennessee River. The population represents a southern range extension for the species.

A recent collection of *Draba ramosissima* Desv. from Alabama is believed the be the first from the state. The taxon was not included in *Plant Life of Alabama* (Mohr 1901), a recently published comprehensive checklist for the state (Kral et al. 2011), or the Alabama Plant Atlas (Keener et al. 2016, a virtual herbarium data consortium of nine state herbaria).

Voucher. **USA. Alabama.** Marshall Co.: just SW of Fort Deposit Point, north bank of the Tennessee River at river mile 353.5, 34.428690° -86.332700°, 23 Apr 2015, *Dattilo s.n.* (UWAL). Figures 1–3.

The native distribution of *Draba ramosissima* is primarily centered in the southern Appalachians, where it is present in parts of Kentucky, Maryland, North Carolina, Tennessee, Virginia, and West Virginia (Kartesz 2015). When comparing the known distribution with Level III Ecoregions of the Continental United States (US EPA 2013), it can be found in parts the Blue Ridge, Ridge and Valley, Central Appalachians, and Southwestern Appalachians of the states listed above. While the species appears to be globally secure (G4), it has been assigned a rank S2 (Imperiled) by the North Carolina and Tennessee Natural Heritage programs (NatureServe 2015). The habitat for this species is often characterized by cliffs, bluffs, and rocky woods of limestone or shale (Al-Shehbaz et al 2010; Rollins 1993).

The habitat of the Alabama *Draba ramosissima* population is the edge of a limestone bluff with a sparse tree canopy primarily of Eastern Red Cedar. Subsequent surveys located a second location for the species several hundred feet to the west of the original observation, but no collection was made. In total, between 30 and 40 individual plants occur at the two sites. The discovery creates a new southernmost range extension for the species, approximately 180 km southwest of Polk Co., Tennessee. The population is approximately the same distance south-southwest of Dekalb Co., Tennessee, which is further north than Polk County.

The population of *Draba ramosissima* was observed during botanical surveys of limestone outcrop habitats between river miles 338-354 along the Tennessee River. Field surveys documented similar habitats at Black Bluff, Blue Rock Bluff, Clark Bluff, Honey Bluff, and Painted Bluff, but *D. ramosissima* was found only at the single area just southwest of Fort Deposit Point. It is expected

that the conservation status in Alabama will be assigned an S1 (Critically Imperiled) unless several other populations are discovered.

In recent years, systematic studies and subsequent treatments have transferred taxa formally classified in the genus Draba to Abdra and Tomostima (Al-Shehbaz 2012; Weakley 2015). In Alabama these include

Abdra brachycarpa (Nutt. ex Torr. & Gray) Greene (= D. brachycarpa), Tomostima cuneifolia (Nutt. ex Torr. & Gray) Al-Shehbaz et al. (= D. cuneifolia), and *Tomostima reptans* (Lam.) Al-Shehbaz et al. (= *D. reptans*)

with only D. verna L. remaining in the genus. With the addition of D. ramosissma to the Alabama flora, total number of *Draba* (sensu stricto) taxa in the state is two. The pair can be easily separated morphologically as D. verna is scapose with flat siliques while D. ramosissma produces several stem leaves and twisted siliques.

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Figure 1. Draba ramosissima from Marshall Co., Alabama (Dattilo s.n., UWAL).

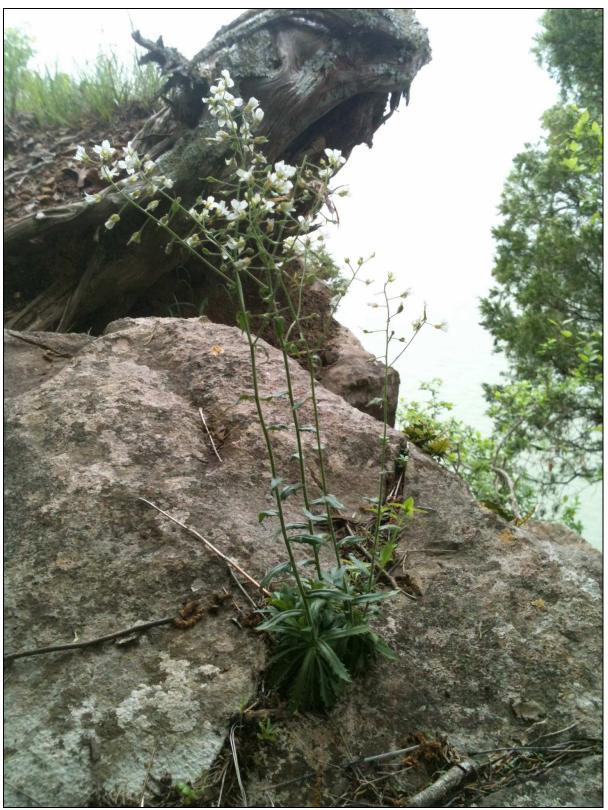


Figure 2. Habit of *Draba ramosissima* along limestone bluff, Marshall Co. Alabama.



Figure 3. Draba ramosissima stem base (left); flowers (right).



Figure 4. Alabama map showing Marshall Co., where the population of *Draba ramosissima* occurs.